

CLAIMS:

1. An erasable and programmable non-volatile cell, comprising

- a first transistor (10) having a source, a drain and a gate;
- a floating capacitor (FT) having a floating gate (30) and a control gate (40), said floating gate being connected to said gate of said first transistor; and
- means to detect the state, whether erased or programmed, of the cell;

5 characterized in that said means to detect the state of the cell comprises a second transistor (20) having a source, a drain and a gate, said second transistor (20) being complementary to said first transistor (10) and said gate of said second transistor being connected to said floating gate (30).

10 2. The cell according to claim 1, characterized in that said first transistor (10) is an n-channel transistor and said second transistor (20) is a p-channel transistor.

15 3. The cell according to claim 2, characterized in that said first and second transistors (10, 20) are MOSFET transistors.

20 4. The cell according to any of claims 1 to 3, characterized in that the n-well diffusion region of said p-channel transistor (20) is the control gate (40) of said floating capacitor.

5. The cell according to any of claims 1 to 4, characterized in that said floating gate (30) and the gates of said first (10) and second (20) transistors are embodied as single polymer layer.

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6. Liquid crystal display driver, comprising a non-volatile cell according to any of claims 1 to 5.

10. Portable equipment powered by battery, such as mobile phones, calculators, pagers, comprising a non-volatile cell according to any of claims 1 and 5.

8. Use of non-volatile cells according to any of claims 1 to 5 for calibration of electrical parameters in an integrated circuit.

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